5:Cooper E-4 (no date) 1946 SG4 Araucanians SG4
Picunche

facients, aphrodisiacs, and for a great many other purposes, in infusions, for massages, and in other ways, depending on the malady or on the objective desired. Bloodletting with a small pointed flint, hafted, was common within as well as outside of shamanistic practice (Oyarzún, 1916–17, pp. 61–62). An enema syringe was made of the bladder of an animal with a small cane tube attached thereto. Rosales (1877–78, 1:324) saw an Indian give water boiled with bezoar in it to a person ill of heart disease. Sweat baths were taken as follows, according to Félix José (1916, 1:236): Wild sage or other plants were put in water in a trough, and four white-hot stones thrown successively into the trough over which the patient placed himself, covered with blankets or clothing in order to sweat. There was also considerable skill in handling of dislocations, fractures, and wounds. (For details on medical and hygienic practices, cf. Gusinde, 1916–17.)

Communication.—To judge from the mention of them in the very early literature, smoke signaling (Mariño de Lovera, 1865, p. 116) and the quipu (González de Nájera, 1889, p. 101; Ovalle, 1888, 12:162) were pre-Hispanic. The quipu (pron) or knotted cord was used for a number of purposes: To keep accounts of livestock and records of events (Ovalle, loc.cit.; Bullock, 1911, p. 18); to indicate the number of days at the end of which the summoned representatives or warriors would assemble for war, festival, sport, or other business; to keep tab of the number of days' work done, or of the number of payments to be made in case of composition for murder (Febrés, 1882, s.v. pron; Havestadt, 1883, 1:521, 2:755); and for other purposes.

Enumeration, time-reckoning, and measures.—Counting was by the decimal system. The numbers for 100 and 1,000 were from *Quechua*.

The year was divided into two parts by the December and June solstices, into 4 seasons, and into 12 lunar months; the 24-hour day into 10 or 12 parts. Moesbach (1936, pp. 82–84) lists 6 seasons and about 15 divisions of the day. The time of day was calculated by the position of the sun; of night, by the stars.

Various lineal measures were recognized corresponding more or less to our span, foot, pace, arm-length, etc. (Molina, 1901, p. 177; Guevara Silva, 1898, 1:288); and liquid and dry measures corresponding roughly to our pint, quart, six-quarts, etc. (Molina, ibid.).

Mental derangement, it may be added, in the form of milder paratares or graver psychoses appears to have been uncommon, at least in recent times (Guevara Silva, 1913, pp. 306–07).

CULTURE OF THE PICUNCHE

Of the culture of the *Picunche*, the *Araucanian*-speaking natives who formerly occupied the region from the foot of the Andes to the Coast and from Coquimbo or the Choapa to the Itata River or the Bio-Bio River, very little is known.

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202 534 only 19 kullkull have been heard, the 19 will then blow in unison hoping that the twentieth will hear them and answer. No boat will sail far away from sounds of the kullkull; none has been known to have gotten lost because of a fog, but it has happened that one could not hear the kullkull and consequently got away and was taken out to sea by the wind and lost.

No informant had heard of smoke signaling among Chilean Araucanians (it was recorded by one of Cooper's sources, 1946, p. 754), but an old Panguipulli man knew that Argentine Araucanians who were lost climbed to a hilltop—"there are many hilltops there, you know"—and built a fire to attract attention. "Anyone seeing the fire knew a lost person had kindled it, and should be rescued."

MEASUREMENTS: LINEAR, SURFACE, QUANTITY, WEIGHT, DISTANCE

●804 Araucanian traditional linear measurements, still in use today, are the pichi duke (the Spanish jeme), the distance between tip of thumb and first finger at farthest stretch; the fücha duke (the Spanish cuarta), the distance between tip of thumb and little finger at farthest stretch; and the wima. If a wima is measured by a man, it will extend from his Adams apple, or the middle of his chest, to the tips of the fingers of an outstretched arm, or, if he is a large man, only to the tip of the thumb. A woman measures a wima from the shoulder joint of one arm to the tips of the fingers of the other arm.

Both the pichi duke and the fücha duke are used in measuring small things, such as small pieces of lumber or standard widths and lengths of woven articles, such as choapino and lama. One woman demonstrating measuring with the pichi duke slid the tip of her first finger into the position of her thumb, moved the thumb forward to another complete handstretch, and repeated this as often as she needed to. Another woman did the reverse—she slid her thumb into the position of her finger.

Wima are used in measuring lengths, such as those needed in building a ruka or a puma trap, or in measuring land. An occasional woman uses it in measuring choapino. "I know the length of my wima because I measured it against a meter measuring stick that a Chilean had." As many wima as are needed for a length of anything are measured off on a strand of yarn, which then serves as a measuring tape. Although, in general, clothing is fitted to the wearer—a poncho, for example, must reach from side of neck straight across the shoulder and down the arm to the knuckles of the hand and be long enough to touch the knees—the weaver, for convenience sake, may take the measurements on strands of yarn also.

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Eye measurements (approximate) are used in selecting a tree from which cart wheels are to be made. "Any man who knows how to make a wheel knows that the tree minus the bark must make wheels large enough to keep the cart from hitting high spots in cart trails." An informant indicated by eye, on a table, the length and width of a bird trap. Two Alepúe men prepared bundles of cochayuyo for the market. Cochayuyo is an edible alga collected in shallow water on the shores of the Pacific. The length of each bundle (approximately 18 inches) was measured by eye; the thickness included what a man could hold between both hands when tips of thumbs and fingers met.

Chilean linear measurements now in use, "because we have to deal with Chileans," are the pulgada, measured by distance from tip of thumb to first knuckle (approximately an inch); the vara (approximately 34 inches); the meter (39.37 inches); and the darea (approximately 42 by 47 feet).

The diameter of logs sold to lumber camps is measured in pulgadas and paid for on this basis. Fences are erected and paid for on the basis of vara. "To make certain that I shall always know where I can find the length of a vara, I measured one off on the singletree of my cart." Something I noticed other men had also done. I saw one man lay a stick on the singletree of his cart where he had marked off a vara, mark the stick and use it in measuring a fence. Vara were also marked off on ax handles.

The meter serves as a basis for linear and surface measurements in many instances when dealing with Chileans. Orders for woven throws and chosgino and blankets to be sold in Chilean markets are given in meters. "But I do not always have a meter measure handy; I know that my wima is nearly a meter and I use it. Men usually know how many of their duke make a meter, and they then measure off in so many duke. My husband knows a meter is four of his füchi duke." A Chilean present at an interview remarked, "I know that from the earth to my belt, when I stand erect, measures a meter; but five of my complete hand stretches is also a meter." "Yes, five füchi duke," agreed an Araucanian. A darea, according to informants, is a measure used only at harvest time. "It is used in connection with a field of grain; it covers as much land as a man, who works conscientiously all day, can cut with a sickle. We never spoke of darea until the Spanish came here."

Quantity measures were pinches of various amounts and both single and joined handfuls. These were generally used in measuring herbs. Another measure was a cuplike implement made by cutting off the

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804 head end of an ox horn and plugging the narrower end with a wooden stopper. The measure is still used in Chilean stores in the Araucanian country. Today, also, the Chilean almud (0.8 liter, dry measure) is used—a box is the measuring implement. A man may be paid in almuds of wheat for cutting grain. No Araucanian measure of weight was known to informants.

Distances today, as formerly, are measured by time consumed in covering them on horseback. Riding is done in daytime; at nights, only in case of sickness or a similar urgent reason. Distances are spoken of as "a half day on horseback," "less than a half day," "more than a half day," "a day," "three days," etc. "The distance across Chile from the coast of the Pacific here in Alepúe to the Argentine line, past Villarrica, is three days on horseback by a swift, safe rider," said an Alepúe horseman.

DIVERSIONS

VISITING AND CONVERSATION, STORIES, SMOKING

574 Visiting back and forth is done primarily among relatives. Occasionally an entire family sets out with the intention of visting relatives; at other times visiting is concomitant to work, such as harvesting or the building of a ruka. Any person is welcome to drop in en route at the ruka of a relative. Families not related meet at fiestas, where acquaintances are renewed and visiting is done. Within the family itself visiting is done while members wait for meals, during rest periods, or in the evening; things talked about are the work and the happenings of the day; news is relayed, if any has been heard.

521 The Araucanian is a good conversationalist and may become very animated. However, he probably does not converse on all occasions merely to be talking. At fiestas women were seen sitting together for hours, quietly observing what was going on, while the men gathered in groups, generally according to age, smoked, and discussed current topics. In the summer of 1946-47 the principal subjects of conversation were the harvest, which they feared would be insufficient because of unfavorable weather at growing time, and the propaganda that was being spread by Communists in the area that the United States would soon make Chile an American colony. At a fiesta in Alepúe area, plans for a program that was to be held in the afternoon, mostly oratory and choike dances, formed one of the chief topics of conversation. At intervals, all during that day, both men and women regaled themselves with chicha from a small keg. Occasionally, one of the men filled a bottle and went about filling cups of those who were thirsty. By the

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they began to move backward along the edge of both sides of the tray. While the kernels were thus on the move, the wind removed the chaff. Occasionally the girl halted to throw off ears that turned up, and to stir the kernels with her hands to find more. When chaff and ears had been removed from all, she poured the kernels into a basket and walked back to the ruka to prepare them for the family's midday meal. (Cf. pp. 206-209 for the preparation of them.) Threshing and winnowing took 40 minutes.

Today, every family that has a right to own land in an area raises wheat on one or several pieces of it, either on burnt-over land or in natural glades. These differ in size and shape (pls. 1; 35, *1* and *2*). No informant knew how much land he had under cultivation. Pointing out his fields, he might say, "I believe I have about two dareas here, and one over there. Darea is a word we got from the Chileans, and is used only at harvest time. It is a piece of land, the amount of grain on which approximates what a man can cut by hand in a day. We use it only when hiring a man to help us." A woman listening in interjected, "If one hurries a little, two dareas can be cut in one day." "In this area [Coñaripe] a darea is a piece of land approximately 80 meters square." A Boroa man stretched an arm, and noted that from his chest to the tip of his hand approximated a vara, and added, "I think a darea is 70 by 50 varas. In our area, because of the contour of the land, a darea is usually longer than it is wide." Fields are not fertilized, but are allowed to lie fallow for one or two years.

Agricultural implements formerly used, according to Gunkel, were a wooden pick (chopeñ) made either of luma or temu, a wooden spade, and perforated stones (catancura). (Cf. Gunkel, 1944, pp. 315-321 for complete description.) Catancura were used in smashing lumps of earth turned up with pick or spade. Although metal hoes and spades have replaced the wooden ones, all three wooden implements were seen during the present study, and were being used in gardening. Fields were being plowed with plows drawn by oxen (pl. 34). There were a few plows with an iron share; all others had wooden shares. Neighbors borrowed plows from each other.

Wheat was the only small grain I saw cultivated. Seeding is done by hand. If a man does not have sufficient seed, another will arrange with him for the amount he needs, in which case the harvest is shared, in accordance with an old custom. In Boroa area, "If one man furnishes the land and another the seed, each receives half of the harvest; if each furnishes half the seed, and one the land, each also receives half the harvest." In Coñaripe, while I was there, one man furnished

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Anyone hired to help is paid in either Chilean money or in wheat. For cutting a darea, a hired man was being paid 30 pesos (one U.S. dollar) in 1946, or 3½ almuds of wheat—a standard almud (a box used in measuring) holds approximately 7 to 8 kilograms, or 0.8 of a liter. "We have no Mapuche word for almud; this manner of paying we learned from the Chileans."

Most wheat today is threshed in the traditional way, by being tramped upon (kailfilkau) either by human beings, or by horses on hard ground. Children aged 9 and 10 were permitted to help tramp. Tramping is done to the rhythm of one of several songs. An informant demonstrated by shuffling his feet two steps forward and three steps backward, and then taking a long step forward to get off the ears he had just been stepping on, and onto the others, and singing, "Beat, my feet! You and the jilguero (bird) break these ribs." He added, "The jilguero walks like I showed you the men that are threshing do; that bird does not hop."

In Alepúe area, threshing is still done in the traditional communal way in which neighbors assist one another. Each family brings its loads of grain by oxcart to the customary place, usually on a knoll. Here is the lila, a circular area enclosed by a fence (pl. 35, *3*), where the threshing is done by horses. Connected with the lila there is usually another fenced-in area in which the horses are rested. Threshing is done in the following manner: The wheat is laid with heads of grain toward the center, and horses—as many as 12—are then brought in from the adjoining enclosure. One is ridden by a man who drives the horses round and round, keeping them close to the fence. "He must not let them trample on the heads of the grain for fear of crushing the kernels." Then abruptly he swings the horse he is riding about-face and drives all the other horses in the opposite direction. He repeats this procedure several times and then drives the horses back into their enclosure, as they cannot stand this mauling around too long. While the horses are resting—they may be given four such rest periods in a day—the men sweep the kernels together with branches of brush or shrubbery, "like we use to sweep at home." Handfuls of the kernels are then thrown into the air to let the wind remove the chaff. The chaff-free kernels are taken home and stored in the ruka—today in cloth sacks, formerly in sacks made of hide. Before the wheat is used as food, it is again winnowed. Each family takes its turn at the lila. When the threshing is finished, all families participate in the traditional abundant meal, including an oversupply of chicha.

In Cofiripe area, where threshing is done by Chileans with a steam-

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or ruka. "There are, however," the informant added, "still many that cook, work, and sleep in a one-room ruka; much depends on the size of the family." 342

Cooper's sources recorded that as many as 80 to 90 persons lived in a single ruka; 30 to 40 was a more common number. Dimensions of ruka varied from 16 to 20 feet in length by 10 to 13 feet in width, to 66 feet in length by 33 feet in width; an occasional one was longer. A cacique's ruka was estimated by one source to have been approximately 140 feet long and 30 feet wide, with a ridge pole 15 feet aboveground. In Cautín, ruka were 400 to 800 feet square. Most ruka, however, had only one or two entrances, with no doors or windows. An opening (or openings) in the center of the roof served as a smoke hole (something my informants doubted). Small conical thatched ruka were also used, according to Cooper's sources. Warriors made temporary shelters against rain and hot sun by arching four sticks and laying over these four large leaves of nalca. The interior of the larger ruka was usually divided into compartments or alcoves opening off the central section, and served as sleeping quarters for the different families or for the wives of one man. Ordinarily there was a separate fireplace provided for each married couple or wife. Storage space was in lofts or in cane-partitioned bins (1946, pp. 707-708).

Today the size of a ruka depends on the wishes and needs of the owner. A wima (the distance from chest to fingers of an outstretched arm) is the unit of measurement. "When I used to help to build ruka," said a 100-year-old Cofiaripe man, "we measured off so many wima on yarn for the length, so many for the width, and so many for the height, and then set out to build the ruka accordingly. An Alepúe man in his forties said: "Today a measuring pole of one vara [2.8 feet] is used. Standard length of rafters is 4½ vara; the height of walls, always greater than 3½ vara; the width and length of the ground plan depends on the size of the ruka that the man wants to build." 342 804●

Regarding the ruka of a man with several wives, a 33-year-old Cofiaripe man told that his grandfather had one large ruka for his two wives; that men with more than one wife today have a ruka for each wife. "A young man near here who has two wives has a ruka for each; the two ruka are about a 5-minutes' walk apart. An old man here has one of his two wives living across the river and the other in Lliuco." 342 595

Ruka have no windows; usually each has two entrances, located in walls away from prevailing winds—in opposite walls, sometimes in adjoining ones. Doors are upright planks that are generally tied 342

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day, and let it settle. The liquid was then poured off into the boiling dye from which she had removed the skeins. At this point she said that there would be an offensive odor soon, because of the putrid urine, and that maybe we would like to leave the ruka. When the kettle was again boiling she returned the skeins to it and let all boil for a while, after which she squeezed a handful of yarn free of liquid and examined the color. After another 10 minutes she removed the skeins, and sent her daughter to hang them on a fence to dry. The teen-age daughter had assisted her all during the dyeing. "That is the way she learns; that is how I learned—by helping my mother dye." The same informant set commercial dyes by boiling the dyed yarn in water in which commercial alum had been dissolved. I did not see any tie-dyeing, noted by Cooper and described by his sources (1946, p. 717).

Weaving is done by women and older girls (pls. 57, *2*; 59). School girls younger than 15 years had not done any weaving. Articles woven today for use of men and boys are ponchos (makuñ) and belts (chamallwe); for women and older girls, dresses (kəpam), shawls (ikülla), belts (trarüwe), and headbands (trarulonko); for household use and for sale, blankets, lama, and choapino. Lama and choapino are used by Araucanians as throws for stools and benches, and as saddle covers. Chileans use them as throws and rugs.

Before setting up the loom, measurements of the article to be woven are determined and the loom adjusted to them. Measurements for clothing, as previously stated, are taken on the person who is to wear them. Generally, pieces of yarn serve as measuring tape; knots are made where measures end. "I made a poncho for him recently. I took these two measurements." The woman indicated two lengths—one from his neck to halfway between his waist line and knees, and the other from his neck to his thumb with his arm outstretched. The measurements for a blanket are taken from one already made, unless one is being woven for a specific person, in which case the length will depend on the height of that person. Measurements of lama and choapino depend on the use that is to be made of them. A woman will say, "I am going to make this choapino so wide and so long [indicating the dimensions with hand stretches]; the storekeeper wants two of that size."

Weaving is done on a rectangular adjustable frame called a clou. The frame is made by tying two horizontal beams (kalo)—oblong pieces of wood planed down on all sides—to two upright poles (witralwitral) made of two saplings trimmed of twigs and bark. Shuttles (yiwülle) are either short, straight pieces of wood or stout twigs, or more often

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sounds of the trutruka. (Cf. pl. 70, *1*, *2*, for trutruka.) Smoke and fire signals were begun on one mountaintop, taken up by persons on a neighboring one and on all others where it had been seen, and so continued until the message was received by all. In areas where people lived in valleys, where mountaintops could not be readily seen, the trutruka was blown. Wherever its sound was heard, other trutruka were blown, until all areas had received the notice. "Araucanians say that when a stranger entered the pre-Cordillera, in those early days, the news of it, before long, reached the upper end of the Cordillera." Kolupan did not agree with the above. "Trutruka," he said, "were not used for signaling. And all I know about the use of fire is that the Tehuelche used it when hunting guanaco. When we wanted to send news from one place to another, we sent messengers on horseback to carry it. Such messengers we called welkin." 202

MEASUREMENTS: LINEAR, SURFACE, DISTANCE, QUANTITY

The shortest measurement was the pulgada—a measurement from tip to first knuckle of the thumb. An informant measured a bean used in playing a game in this manner. A hand stretch from tip of thumb to tip of first finger is called duke; from tip of thumb to tip of little finger, chanjilkue. In using the hand-stretch measure, informants slid the thumb into the position of the finger, moving to the right if the right hand was used or to the left if the left hand was used. The length and width of the cradleboard and the belt used in tying a baby into its cradle were so measured. Lengths, widths, and heights were also indicated as the distance shown between hands. The length of a throw was measured by double arm stretches (nūfkū), unless it was measured over another throw. Distances on the ground were stepped off by long steps known as trekan. 804

Clothing was woven to fit the person for whom it was intended—"it has to fit that person." Either the measurements were taken from an article of clothing owned by the one for whom the new one was being woven, or they were taken directly on the person. A strand of yarn was used in measuring. An informant showed how she took measurements for a poncho: she put a strand of yarn across the interpreter's shoulders and brought both ends to the knee, one in front and the other in back. "How long do you want the poncho to be?" she asked. "Some men wear theirs longer than the knee; most men prefer theirs to just above the knee." She doubled this length and made a knot at that point. When ready to weave the poncho, she would cut the yarn into two equal lengths, fastening a length to each 804 294

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804 side of the loom. This assures even lengths of the poncho, she noted.
294 For the width of the poncho she measured the distance between wrists of the interpreter's outstretched arms, and made a knot to indicate this measurement. The vertical bars of her loom needed to be that distance apart to insure the proper width.

804 Since trade with Argentines requires a knowledge of the meter, the length of a meter is marked off on some object. "We marked ours off on the rope of braided horsehide that we use in lassoing animals."

Measurements of quantity were pinches, single handfuls, and double handfuls, with hands held like scoops.

DIVERSIONS

VISITING AND CONVERSATION, STORIES, SMOKING

574 Visiting within the family or among relatives or neighbors was,
[517] and still is, a popular pastime. Casual passers-by also may approach
[516] a group, wait until invited, and then join in the visiting. Most persons squat while visiting, but available chairs and benches are usually occupied. Formerly caciques reclined sidewise, resting on a pack of pelts. Men squat with knees apart and legs crossed under them at ankles; women squat with feet protruding at the left side. Children were always tolerated during adult conversation as listeners-in. "It was a good way for them to learn." Formerly, on occasions, after a family had made much chicha, invitations were sent to relatives and friends to participate in its consumption. Usually an abundance of meat was roasted outdoors for the get-together. A casual visitor did not stay for meals unless expressly invited to do so. An ample meal, sometimes an abundant one, was served to all invited guests on the occasions of the ear-piercing and naming of a child or following a girl's menstrual isolation. Some families never gave a feast: they were either too poor to do so, or had no interest in doing so.

521 Generally, conversation during visiting covered current topics, although legends and stories associated with wars were often related also. "There really was much to talk about formerly," said Kolupan. "We talked about the whereabouts of the guanaco; where the soldiers were; why we were again being chased from our land; how we were going to learn the language of the Whites; and many other things."

During my visit current topics were a suicide of a young Araucanian man; the national presidential election; preparations for driving cattle and sheep to summer pastures; taking a sick old woman—a favorite in the neighborhood—to a hospital in San Martín de los Andes; the baptism of a neighbor's baby; the critical illness of Father Ludovico.